



## UNITED STATES DEPARTMENT OF COMMERCE

## Patent and Trademark Office

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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
08/558,544	11/16/95	YAMAZAKI	S 0756-1441

EXAMINER
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B5M2/0911

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2010 CORPORATE RIDGE SUITE 600  
MCLEAN VA 22102

MINTEL, W	PAPER NUMBER
ART UNIT	

2508

DATE MAILED: 09/11/97

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

## OFFICE ACTION SUMMARY

- ☐ Responsive to communication(s) filed on \_\_\_\_\_
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

- ☒ Claim(s) 1-28 is/are pending in the application.
- ☒ Of the above, claim(s) 8-28 is/are withdrawn from consideration.
- ☒ Claim(s) 1-7 is/are allowed.
- ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☒ received in Application No. (Series Code/Serial Number) 08/792936
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

- ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- ☒ Notice of Reference Cited, PTO-892
- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 5
- ☐ Interview Summary, PTO-413
- ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

SN #08/558544

-SEE OFFICE ACTION ON THE FOLLOWING PAGES-

1. The disclosure is objected to because of the following informalities: The specification contains grammatic and other errors. Examples are below. To be fully responsive to this action, Applicant must make a bona fide attempt to correct any other errors. Column 4, line 44, "flight", should be "fly". Column 4, line 45, "is", should be "are". At column 4, line 4,9, "flights" needs to be replaced by "flies". Column 4, line 59, "highly-ordered", should more properly be "high-ordered". Column 4, line 61, "are mixed deposited", is ungrammatic. At column 5, line 39, "more" needs to be deleted. Column 7, line 19, omits "a" after "such". In the claims, "a light", claim 5, line 10, is nonidiomatic and should be "light".

Appropriate correction is required.

2. Claims 1-4 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for semi-amorphous material, does not reasonably provide enablement for a mixture of amorphous and crystalline structures. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. Note the specification always uses the term "semi-amorphous" and gives specific methods to make this specific material.

3. Claims 5-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point

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out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 5, recites a PIN photoelectric conversion element a lines 4-8, but also recites a thin film transistor as sensing light at line 10. To one of ordinary skill such a wording means that both the PIN diode and the TFT are light sensing, but such a recitation is confusing in light of the specification.

5. Claims 5-7 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112 set forth in this Office action.

6. Note no reference discloses, or can be combined to yield, the PIN and thin film transistor using the same layer and formed actually on a substrate. Especially note previously cited Murotami is not a true TFT. Also note that newly cited Miller uses the substrate as part of the PIN diode.

7. Claims 8-28 are allowed over the art of record as follows. Murotami and Miller are described above. Column 9, lines 5-15 of Misawa recite relevant mobilities but lack the claimed common layer on a substrate. Cited as of interest for teaching that the semiconductor of a TFR can<sup>be</sup> partly crystalline are Hirai, Koizumi, Ooshinsky.

Cited as of background interest from the parent case are Ogawa(146), and (631), Iwanami, Mizutami, Shinga, Kitamura(803) and (794).

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8. The reissue declaration fails to address all of the changes made by applicant. Each change represents an acknowledgement of error and should be referred to in the declaration. MPEP 1414 and 1444. In other words, every change must be referred to verbatim in the declaration for each claim.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to W. Mintel whose telephone number is (703) 308-4916. The examiner can normally be reached on M-Th from 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas, can be reached on (703) 308-2772. The fax phone number for this Group is (703) 308-7723.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Mintel/jm  
Sept. 9, 1997

*William Mintel*

**William Mintel  
Primary Exmr.  
A.U. 2508**